

AMENDMENTS IN THE CLAIMS

1. (currently amended) A method for specifying a return of specific data or a notification of publication of the specific data in response to a search query issued to a subscribe and publish communication interface from a subscribing component, said method comprising:

generating a subscription object containing a primary identifier (ID) of a published data, wherein the primary ID is a separate parameter from a type and a format of data;

including within said subscription object an expression indicating a specific context desired for satisfying the subscription object once the published data is identified on the communication interface;

providing within said subscription object an address of a node associated with the subscribing component, which generated said subscription object;

in response to the subscription object requesting a notification of the publication of the specific data, registering said node within said communicating interface as requesting at least a notification of said published data; and

in response to the subscription object requesting a copy of the published data, registering said node within said communicating interface as requesting a copy of the published data;

expanding a registration of said node to include said expression;

flagging a registration of said node to indicate additional criteria needs to be satisfied prior to issuing the notification or forwarding published data to said node;

matching an ID of a newly published data to a primary ID of a desired published data;

in response to the registration having an associated flag, verifying that said additional criteria is satisfied before indicating a match;

wherein said node receives a notification when a notification is desired and said node receives said published data when said published data is requested, based on a type of registration requested by the subscription object;

wherein, once the subscription object is placed on the subscribe and publish communication interface, a response to the subscription object is only provided following publication of the published data with the primary ID and a confirmation of the specific context; and

when said expression is a logical expression requiring a publication of two or more different data each having unique data type IDs in order to satisfy a part of the specific context;

retrieving an associated data type ID for each publication to the communication interface;

comparing the associated data type ID for two or more different published data against each unique data type ID within said logical expression; and

providing the response to said subscription object only in response to each of said unique data type IDs within the logical expression matching a required two or more associated data type IDs for two or more different published data.

2 - 4. (canceled)

5. (original) The method of Claim 1, wherein said expression is a condition expression.

6. (canceled)

7. (currently amended) The method of Claim [[6]] \downarrow , wherein said subscription component is an agent and said method further comprises:

enabling the agent to register interest in pieces of information via expressions, wherein the agent registers interest on an information bus;

enabling the agent to listen for information indicating occurrence of a condition for which the agent is designed to response, said condition corresponding to satisfaction of one or more criteria within an expression;

receiving confirmation that all criteria within said expression has been satisfied; and

completing a secondary function when said confirmation is received.

8. (currently amended) The method of claim 7, wherein said subscribe and publish communication interface is an information kit and said subscription object is an information kit subscription object, the method further comprising:

providing a query expression within said subscription object containing an operand other than a wildcard for uniquely differentiating said query from a query for a generic response;

publishing said query to an information kit; and

receiving a response containing a publication object satisfying said entire query expression.

9. (canceled)
10. (currently amended) A system comprising:
 - a processor; and

program means executing on the processor for controlling a return of specific data in response to a search query issued to a subscribe and publish communication interface, said program means comprising:

 - means for generating a subscription object containing a primary identifier (ID) of a published data;
 - means for including within said subscription object an expression indicating a specific context desired for satisfying the subscription object once the published data is identified on the communication interface;
 - means for providing within said subscription object an address of a node associated with a subscribing component, which generated said subscription object; and
 - means for registering said node within said communicating interface as requesting at least a notification of said published data, wherein said node receives a notification when only a notification is desired and said node receives said published data when said published data is requested, based on a type of registration requested by the subscription object;

means for expanding a registration of said node to include said expression;

means for flagging a registration of said node to indicate additional criteria needs to be satisfied prior to issuing the notification or forwarding published data to said node; and

means for matching an ID of a newly published data to a primary ID of a desired published data;

means, when the registration has an associated flag, for verifying that said additional criteria is satisfied before indicating a match;

wherein, once the subscription object is placed on the subscribe and publish communication interface, a response to the subscription object is only provided following publication of the published data and a confirmation of the specific context; and

wherein, when said expression is a logical expression requiring a publication of two or more different data each having unique data type IDs, said system further comprises:

means for retrieving an associated data type ID for each publication to the communication interface;

means for comparing the publication's data type ID against each unique data type ID within said logical expression; and

means for providing the response to said subscription object only when each of said data type IDs are matched against publication data type IDs.

11 - 13. (canceled)

14. (original) The system of Claim 10, wherein said expression is one or a combination of a logical expression and a condition expression.

15. (canceled)

16. (currently amended) The system of Claim [[15]] 10, wherein said subscription component is an agent and said system further comprises:

means for enabling the agent to register interest in pieces of information via expressions, wherein the agent registers interest on an information bus;

means for enabling the agent to listen for information indicating occurrence of a condition for which the agent is designed to response, said condition corresponding to satisfaction of one or more criteria within an expression;

means for receiving confirmation that all criteria within said expression has been satisfied; and

means for completing a secondary function when said confirmation is received.

17. (currently amended) The system of claim 16, wherein said subscribe and publish communication interface is an information kit and said subscription object is an information kit subscription object, and said system further comprises:

means for providing a query expression within said subscription object containing an operand other than a wildcard for uniquely differentiating said query from a query for a generic response;

means for publishing said query to an information kit; and

means for receiving a response containing a publication object satisfying said entire query expression.

18. (canceled)
19. (currently amended) A computer program product comprising:
a tangible computer readable medium; and
program code on said computer readable medium for specifying a return of specific data in response to a search query issued to a subscribe and publish communication interface, said program code further comprising code for:
generating a subscription object containing a primary identifier (ID) of a published data;
including within said subscription object an expression indicating a specific context desired for satisfying the subscription object once the published data is identified on the communication interface;
providing within said subscription object an address of a node associated with a subscribing component, which generated said subscription object; and
registering said node within said communicating interface as requesting at least a notification of said published data, wherein said node receives a notification when only a notification is desired and said node receives said published data when said published data is requested, based on a type of registration requested by the subscription object;
expanding a registration of said node to include said expression;
flagging a registration of said node to indicate additional criteria needs to be satisfied prior to issuing the notification or forwarding published data to said node;
matching an ID of a newly published data to a primary ID of a desired published data;
when the registration has an associated flag, verifying that said additional criteria is satisfied before indicating a match;
wherein, once the subscription object is placed on the subscribe and publish communication interface, a response to the subscription object is only provided following publication of the published data and a confirmation of the specific context; and
wherein, when said expression is a logical expression requiring a publication of two or more different data each having unique data type IDs, said program code further comprises code for:
retrieving an associated data type ID for each publication to the communication interface;
comparing the publication's data type ID against each unique data type ID within said logical expression; and

providing the response to said subscription object only when each of said data type IDs are matched against publication data type IDs.

20 - 22. (canceled)

23. (original) The computer program product of Claim 19, wherein said expression is one or a combination of a logical expression and a condition expression.

24. (canceled)

25. (currently amended) The computer program product of Claim [[24]] 19, wherein said subscription component is an agent and said program code further comprises code for:

enabling the agent to register interest in pieces of information via expressions, wherein the agent registers interest on an information bus;

enabling the agent to listen for information indicating occurrence of a condition for which the agent is designed to respond, said condition corresponding to satisfaction of one or more criteria within an expression;

receiving confirmation that all criteria within said expression has been satisfied; and
completing a secondary function when said confirmation is received.

26. (currently amended) The computer program product of claim 25, wherein said subscribe and publish communication interface is an information kit and said subscription object is an information kit subscription object, said program product further comprising code for:

providing a query expression within said subscription object containing an operand other than a wildcard for uniquely differentiating said query from a query for a generic response;

publishing said query to an information kit; and

receiving a response containing a publication object satisfying said entire query expression.

27. (canceled)